2. EXECUTIVE SUMMARY

PURPOSE

The property at 433 West Civic Center Drive in Santa Ana, California was recently purchased by the County of Orange for relocating and expanding the County Archives. This Study was conducted to determine feasibility of prospective property for County Archive facility.

SUMMARY

Following field investigation, Existing Building Assessment was prepared by architect's consultant team: civil engineer, structural engineer, mechanical engineer, plumbing engineer, electrical engineer, fire protection engineer and hazardous materials consultant. Consultants' reports include observation, evaluation and recommendation. After meeting with County Archive staff, Design Criteria was established outlining Archive's institutional purpose, functions and programs. Based upon Design Criteria and current code standards, three Design Option feasibility schemes were developed with a cost estimate comparison of the three scheme options; also included CEQA determination and future strategy.

EVALUATION AND RECOMMENDATIONS

1. **Architectural:**

Three Design Option Schemes are developed.

For both schemes 1A & 1B, life expectancy of renovated wood framed building is less than 50 years. Existing basement poses a possible flood hazard during heavy rain and possible archive materials and collection water damage. Archival shelving layout is restricted by existing structural system resulting in inefficient use of space. Existing roofing, sheathing and drainage system require overhaul to bring up to proper drainage.

Scheme 1A: Interior Renovation of Existing Building
Total existing floor area, ~6,700 s.f. usable floor area, can accommodate only the current archive inventory requirements

Scheme 1B: Renovation with East and North Additions
Total existing and additional floor space will not meet the programmed future expansion requirements. ~15,800 s.f. total gross floor area

Scheme 2: New Building
New building can meet programmed floor area and can exceed 50-year future growth potential – total gross floor area 22,500 s.f. Proposed life expectancy for concrete and steel system is greater than 50 years.

2. **Civil:**
Civil engineer recommends reevaluation of building utility demands for future occupants. Because site grading and drainage are in poor condition, storm water management and repaving will be required to treat on-site runoff and meet ADA requirements.

3. **Structural:**
Due to heavy loading requirement and potential seismic deficiencies, structural retrofit is required to meet new usage and code requirements. Existing floor framing must be redesigned with additional steel structural beams, columns, floor beams and joists along with additional concrete footings.

4. **Mechanical:**
Current HVAC system has exceeded service life, varies from current code and is not capable of temperature and humidity control requirements. Current floor to floor dimension allow little space for ductwork. Propose acquisition of new HVAC with 4-pipe fan coil system. For new building, recommend a new more energy efficient HVAC with variable air volume (VAV) system.

5. **Plumbing:**
Existing water, natural gas and sanitary sewer utilities need to be extended and verified for adequacy to serve tenant capacity. Recommend low water flow fixtures with sensor-operated flush valves and faucets and a central gas-fired efficiency water heater.

6. **Electrical:**
New electrical service, distribution system, power/lighting, conduit and wiring are recommended since current electrical equipment has exceeded service life. More exterior lighting is required. Propose removal of residential smoke alarm and install fully addressable automatic and manual fire alarm system. Recommend new water/moisture detection system, CCTV and intrusion detection system as well as testing of reusable cable for voice/data system.

7. **Fire Protection:**
Existing exit door hardware need to be replaced with code compliant locks; also emergency lighting and signage are required. Pre-action fire suppression system is proposed.

8. **Hazardous Material:**
Existing building hazardous materials found in acoustical ceiling tiles, transite pipes, lead based floor tiles, exterior stucco and rooftop must be removed.

9. **Construction Cost Estimate Comparison:** Total estimated construction cost:
Scheme 1A: $2,847,000 with average s.f. cost of $425/s.f.
Scheme 1B: $5,656,000 with average s.f. cost of $358/s.f.
Scheme 2: $7,567,000 with average s.f. cost of $336/s.f.

10. **California Environmental Quality Act (CEQA) Strategy:**
CEQA review was conducted in 2007 and notice of exemption was determined. However, exemption status was based upon using existing building with minor alteration by public agency. According to CEQA Guidelines, renovation schemes 1A and 1B meet categorical exemption status. However, if new building is to be constructed, new CEQA submittal and review are required.

CONCLUSION

The existing building cannot support current archive requirements without modifications.

Scheme 1A: Interior renovation can only accommodate current collection. Any future collection will require another separate facility.

Scheme 1B: Renovation with addition can meet partial future program requirements but shelving area layout is inefficient with higher average square foot cost.

Scheme 2: A new building can achieve larger area with lower average square foot cost. There would also be longer service life with more efficient floor area usage to serve the County of Orange Archival Program and the general public.